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ACHIEVEMENT OF STUDENTS IN CATEGORY IV SCHOOLS

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IN

CATEGORY IV SCHOOLS

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ACHIEVEMENT OF STUDENTS IN CATEGORY IV SCHOOLS

The Minister of Education approved the designation of Category IV schools effective September, 1978. Subsequently, eleven rural schools were approved to operate elementary and junior high school programs for the 1978-79 school term. Since concern was expressed about the achievement of students in these schools, the Minister of Education recommended that a study be undertaken at the end of the school year in Grades III, VI and VIII. A committee of the Department recommended that:

1. The 1976 Canadian Test of Basic Skills be administered in all Category IV schools in Grades III, VI and VIII during the latter part of May, 1979.
2. The Director of Special Education notify the schools of the testing program by April 1, 1979.
3. The administration of the tests be conducted by consultants in the Regional Offices of Education.
4. The Director of Student Evaluation & Data Processing Services score the tests and prepare a report on the analysis of achievement for the consideration by members of Directors' Council.

The Canadian Test of Basic Skills (Form 3M, 1976 edition) was selected as the instrument to be used in this testing program for the following reasons:

1. The validity of this test relative to the objectives of the Alberta curriculum is better than that of most other standardized tests. However, the test does not include a section in Science. In other areas the test measures about 70% of the objectives.
2. The test contains sub-tests which are long enough to provide a reliable basis for drawing inferences about the achievement of students.
3. The test has been standardized on a representative sample of Canadian schools selected on the basis of province, size, and type of school.

The Canadian Tests of Basic Skills were constructed to provide a comprehensive and continuous measurement of pupil growth in the fundamental skills of vocabulary, reading, the mechanics of writing, methods of study, and mathematics. The latter three skill areas were further sub-divided into sub-components to provide more detailed information. Although the tests were mainly designed for teachers to assess day-to-day learning activities of students, they may be used as a guide when reporting to school administrators and parents. The tests were administered to English-speaking elementary and Grade VII and VIII students in 139 Canadian schools. Alberta students selected in the random sample constituted about 10% of all elementary

students' scores from this administration and provided the basis for the development of various normative analysis about achievement. One such analysis was the construction of a scale of grade equivalent scores to be used for comparing scores between various levels or separate administrations.

Grade equivalent scores are used to express performance in terms of grade or grade levels. The numerals in the scale represent grade level development from grade one to the end of junior high school. A grade equivalent score of 52 indicates achievement at the second month of Grade V. Since the unit of measurement is one-tenth of a year's growth the normal yearly growth is 10 grade equivalent units.

Grade equivalent scores are subject to misuse and therefore caution should be exercised in their interpretation. A Grade V pupil obtaining a grade equivalent score of 70 on the reading test would rank among the top 10% of Grade V students. This should not be interpreted as readiness for the Grade VII program or that the pupil should skip Grade VI.

The national testing program also provided the basis for the construction of grade equivalent scores of school averages. These scales make it possible to assess the level of achievement between and among schools.

Consultants from the Regional Offices of Education visited the eleven schools during May and administered the tests to the students in the three grades. Table I shows the expected enrolments as well as the number of students who participated in the program. This table shows that the reception accorded the Consultants was excellent.

TABLE I

Enrolments in Grades III, VI, and VIII

In Approved Category 4 Schools

Zone	Grade III	Grade VI	Grade VIII
I	14	4	6
IV	4	11	13
V	9	19	10
VI	10	17	11
TOTAL	37	41	40
Number of Students Participating	40	39	41

Table II shows the grade equivalent scores of school averages, at the three grade levels. In this table the following skills are identified separately:

V - Vocabulary

R - Reading

Language Skills

L1 - Spelling

L2 - Capitalization

L3 - Punctuation

L4 - Usage

Work Study Skills

W1 - Maps

W2 - Graphs

W3 - References

Math Skills

M1 - Concepts

M2 - Problems

Tables III, IV and V show the variations in the achievement graphically. An analysis of the four tables reveals the following:

A. Grade III Students

Since the tests were administered during the latter part of May, the anticipated grade equivalent score, based on the publisher's norms, of most Grade III classes would be 40.

Tables II and III show that the grade equivalent scores of the Category IV schools exceed this level in all areas except in mathematical concepts where the students achieved at a Grade III - eight month level.

Table III shows that the Grade III students achieved much better in all Language skill areas than they did in the Word Study and Math skill areas. Although achievement in the Math skill areas is the lowest the performance is still considered to be satisfactory.

B. Grade VI Students

The achievement of Grade VI students in the Category IV schools is quite satisfactory since all of the sub-test scores exceed the publisher's norm of 70. These students achieved their lowest scores in those skills associated with referencing materials and mathematics.

C. Grade VIII Students

The over-all achievement of the Grade VIII students is satisfactory since in all but one of the skill areas the grade equivalent scores were either equal to or exceeded the publisher's norm, of 90. In skills associated with mathematical concepts the students achieved a grade equivalent score of 89. Although the skills associated with mathematics and reading are the lowest scores the performance of these students is still considered satisfactory.

Conclusion and Recommendation

Students in the Category IV schools achieved at a very satisfactory level in the language skills and at a satisfactory level in all other skill areas. These students appear to be weakest in their mathematical skills.

Since the Category IV schools have only been in operation since September, 1978, the children had attended public schools for either two, five or seven years. It is, therefore, impossible to determine how much of the achievement obtained by the students can be attributed to their school program during this past year. As a result, it is recommended that the students in Grades III, VI, and VIII be re-assessed in 1981. The results of an assessment program in 1981 could be compared with those obtained in 1979 (base year).

TABLE II

GRADE EQUIVALENT SCORES

GRADE III

			LANGUAGE SKILLS				WORK STUDY SKILLS			MATH SKILLS	
	VOCAB-ULARY	READ-ING	SPELLING	CAPITAL-IZATION	PUNC-TUATION	USAGE	MAPS	GRAPHS	REFER-ENCES	CONCEPTS	PROB-LEMS
	V	R	L1	L2	L3	L4	W1	W2	W3	M1	M2
Category IV	44	46	48	44	50	43	45	41	43	38	41
					Grade VI						
Category IV	73	73	80	74	76	74	73	75	71	72	72
					Grade VIII						
Category IV	91	90	91	94	98	95	93	92	93	89	90

TABLE III

GRADE III -- COMPARISON OF GRADE EQUIVALENT SCORES

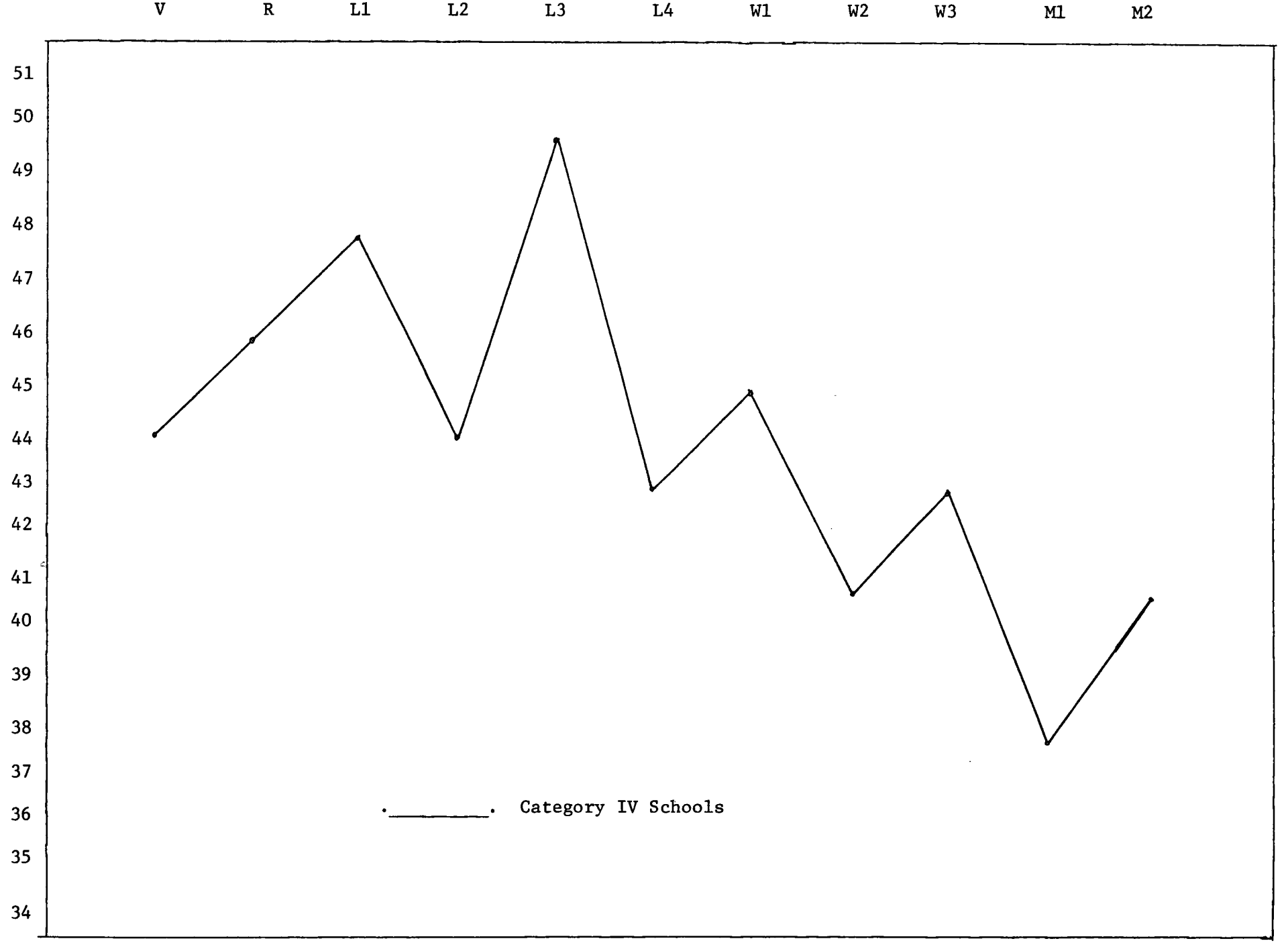


TABLE IV

GRADE VI -- COMPARISON OF GRADE EQUIVALENT SCORES

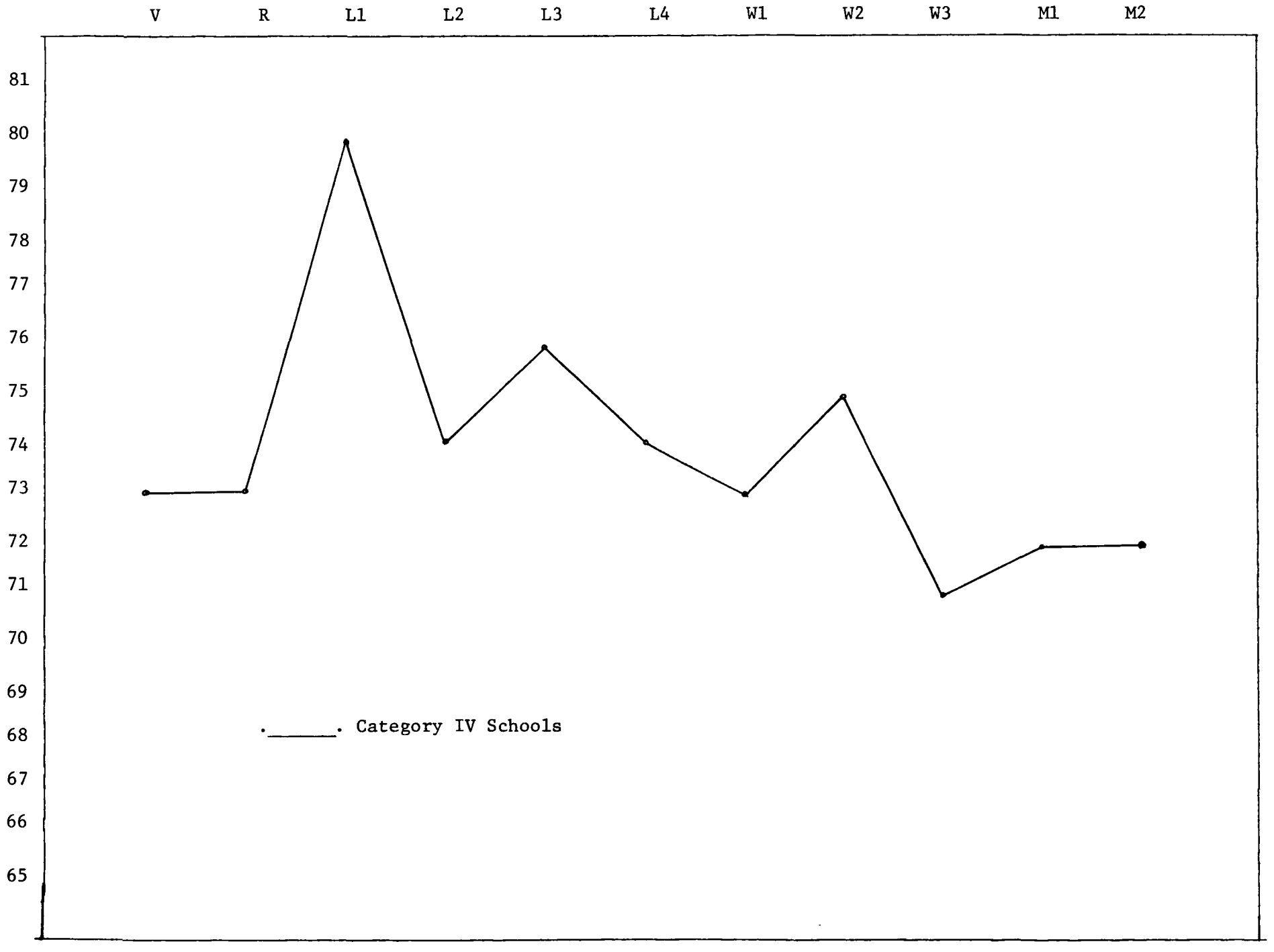


TABLE V

GRADE VIII -- COMPARISON OF GRADE EQUIVALENT SCORES

